Modern Cadastre and Land Administration

Session 3a. People to land relationships

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Objectives
- Examine the concepts of land and the importance of their roles in society
- Understand dynamism of people to land relationships
- Understand how land administration responds

Topics
- Different perspectives and perceptions of land
- Rights, responsibilities and obligations over land
- Dynamic people to land relationships
- Evolution of the people to land relationship
- Importance of land and property

More information
“Land” changes across disciplines

- Physical geographers
  • Land = landscapes and people

- Economists
  • Land = resources, commodities and markets

- Lawyers
  • Land = legally definable spaces, rights and property

- Surveyors and spatial scientists
  • Land = where?
• National ideas of physical “land” vary
  - In some countries land is merely the surface (Indonesia).
  - In others, it does not include buildings (Indonesia, Vietnam and some ex-Communist countries – here urban buildings are the basic commodity).
  - In others, trees and resources are the important commodities, not land itself.

• Approaches to land vary among the world’s people. Most use local, not international norms. But globalism is driving uniform approach in which the cadastre is fundamental

• All societies build LAND ADMINISTRATION SYSTEMS.
Mesopotamian City Plan, Nippur 1500 B.C.E.
(Clay tablet 18 x 21 cm)

Universal businesses of all governments
- Property ownership
- Taxation
- Defence and
- Facilities management
National approach will vary according to historical, legal and social contexts

Common law systems: Ethic of adjudication
Civil law systems: Centrality of the person
Chthonic systems: Recycle the world (traditional)
Talmudic systems: The Perfect Author
Islamic systems: The Law of Later Revelation
Hindu systems: Law as King, but Which Law?
Asian systems: MAKE IT NEW (with Marx?)

Land management capacity will vary according to national wealth and competence.

Only about 30-40 countries have built successful integrated infrastructures to manage their land.
Most people think land is physical

- **Resources**: minerals, petroleum, gasses, trees, water bodies, (crops?)

- **Fixtures**: buildings and immoveable objects

- **Layers**: surface, strata, sub-strata

- **Marine areas**: coastal zones, oceans and their resources
The idea that land is physical influenced early land administration theory:

“land is the surface of the earth, the materials beneath it, the air above and all things fixed to the soil” (Dale and McLaughlin 1988)

Concepts of land influenced LAS design.

Cadastral registers were a feature of the Ottoman world in the 16th and 17th centuries.
Modern land administration takes a different approach, reflecting stages of development

- **Hunter gatherers**, co-existence with land, territoriality
- **Tribalism**, settlement, property equates with possession – Agrarian society
- **Feudalism** – land owned by Crown. Land is key currency but linked to labour (1066-1500s)
- **Private ownership**
- **Industrial Revolution** – market economies, urbanisation and capitalism/socialism and growth of land markets
- **Globalisation**
People to land relationships are dynamic...

For example: the Western evolution

Reference: Ting and others, 1998
Western theory built an idea of land as a bundle of rights Moving away from land as a “thing” to “Who? What? When?”

Land ownership is ownership of rights and powers in relation to the land. In Anglo/American systems the largest bundle available for private ownership is called “fee simple.”

Ownership "Bundle" of Rights

Jacobus, 2003
The conceptual framework was still focused management of information about physical attributes.

Source: Land Administration (Peter Dale and John McLaughlin)
Now modern LAS theory is far more universal and inclusive

In modern land administration theory, people do not own land itself. People have rights, opportunities and privileges to use the land in conformity with community laws, practices and expectations.

MODERN LAS THEORY COMPREHENDS ALL SOCIETIES

Including those whose land is managed by social systems.
MEANWHILE THE PROBLEMS ARE GROWING

• Human-induced degradation of the soil has already affected 20% of the world’s drylands and risks livelihoods of 1 billion people
• Over 50% of the world’s population live within 60 kms of the coast with one third of these coastlines already damaged
• Global emissions of carbon dioxide reached 23.9 billion tonnes in 1996, four times 1950
• In 1995 25% of the world’s mammal species and 11% of bird species are at risk of extinction

UN Environment Program (UNEP) 1999
The most significant problem for LAS is now managing urbanization

• 30 years ago one third of the world’s population lived in urban areas, today 50% live in urban areas, in 30 years two thirds

• By 2025 two thirds of the world’s population will live in water stressed conditions

UN-HABITAT, UN Human Settlements Program
Modern theme: Delivery of secure tenure is essential for national management

- Security
- Social stability
- Credit
- Improvements to land
- Productivity
- Liquidity
- Labour mobility

- Land and property values
- Land and property taxation
- Public services
- Resource management and
- Social development
Tenure security is national priority

- Millennium Development Goals (MDGs)  
- People’s lives require confidence that their homes, businesses and farms are secure.
- Businesses cannot operate without secure land.
- Land cannot be effectively used without very expensive utilities (gas, sewerage, drainage, water) and roads. Even the very poor need waste treatment and potable water.
Summarising

• Many different definitions depending on your standpoint

• Initial Western theory explained land as physical. Now LA theory sees land as “concepts” and “relationships” among people and governments – development, taxation, secure tenures, equitable access.

• Modern land administration uses a multi-disciplinary approach to include the dynamics of all land across all nations.

• **Engineers design and build the LAS infrastructure**
The **physical space** is the start of analysis.
- Add the **way people think** about the space
- Add the **relationships among people** in relation to the space (owners, users, governments and everybody else)

**Land administration systems** manage all three -
- the spaces
- the concepts
- the relationships

By building infrastructure to create order and implement policy.
Main policy driving modern perceptions of land, and hence driving modern LAS ..

Sustainable development

Balance social**, environmental, economic elements
  Manage globalization
  Manage urbanization
Utilize information technology
Administer emergency management
Ensure tenure security
  Manage disputes

Manage markets

**Poverty alleviation, equitable access, tenure security. See Millennium Development Goals (MDG)
SUSTAINABLE DEVELOPMENT

“development that effectively incorporates economic, social, political, conservation and resource management factors in decision-making for development”
The role of LAS in achieving sustainable development

A 1999 answer

2007 trend – the cadastre
YOUR QUESTIONS?

YOUR COMMENTS?